Citation

**Symposium on Interactive 3D Graphics** >archive
**Proceedings of the 1995 symposium on Interactive 3D graphics** >toc
**1995 , Monterey, California, United States**

# Resolving occlusion in augmented reality

**Authors**
Matthias M. Wloka
Brian G. Anderson

**Sponsor**
SIGGRAPH : ACM Special Interest Group on Computer Graphics and Interactive Techniques

**Publisher**
ACM Press New York, NY, USA

Pages: 5 - 12 Series-Proceeding-Article
Year of Publication: 1995
ISBN:0-89791-736-7

doi> http://doi.acm.org/10.1145/199404.199405 (Use this link to Bookmark this page)

> full text > abstract > references > citings > index terms > peer to peer

> Discuss > Similar > Review this Article Save to Binder

> BibTex Format

↑ **FULL TEXT:** Access Rules

**pdf 2.03 MB**

↑ **ABSTRACT**

Current state-of-the-art augmented reality systems simply overlay computer-generated visuals on the real-world imagery, for example via video or optical see-through displays. However, overlays are not effective when displaying data in three dimensions, since occlusion between the real and computer-generated objects is not addressed.We present a video see-through augmented reality system capable of resolving occlusion between real and computer-generated objects. The heart of our system is a new algorithm that assigns depth values to each pixel in a pair of stereo video images in near-real-time. The algorithm belongs to the class of stereo matching algorithms and thus works in fully dynamic environments. We describe our system in general and the stereo matching algorithm in particular.

h c g c cf c